

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

Claims 1-55. (Canceled)

56. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering an antibody which binds amyloid  $\beta$  peptide, or to fragment thereof, thereby treating the subject having Alzheimer's Disease.

57. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering an antibody which specifically binds amyloid  $\beta$  peptide, or to fragment thereof, thereby treating the subject having Alzheimer's Disease.

58. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering an antibody which is targeted to amyloid  $\beta$  peptide, or to fragment thereof, thereby treating the subject having Alzheimer's Disease.

59. (New) The method of claim 56, wherein the antibody is directed to amyloid  $\beta$  peptide, or fragment thereof.

60. (New) The method of claim 56, wherein the antibody is directed to an epitope comprising the first N terminal residue of natural A $\beta$ .

61. (New) The method of claim 56, wherein the antibody is directed to an epitope selected from the group consisting of residues 1-5, 1-10, 1-12, 1-16, and 1-25 of A $\beta$ .

62. (New) The method of claim 56, wherein the antibody is directed to N-terminus-truncated amyloid  $\beta$  peptide fragment.

63. (New) The method of claim 56, wherein the antibody is directed to an epitope comprising the C-terminal amino acid of a naturally occurring form of amyloid  $\beta$ .

64. (New) The method of claim 56, wherein the antibody is directed to the A $\beta$  33-42 epitope.

65. (New) The method of claim 64, wherein the antibody is 21F12.

66. (New) The method of claim 56, wherein the antibody is directed to C-terminus-truncated amyloid  $\beta$  peptide fragment.

67. (New) The method of claim 56, wherein the antibody is directed to the amyloid precursor protein, or a naturally occurring form of amyloid  $\beta$ .

68. (New) The method of claim 56, wherein the antibody is directed to the amyloid precursor protein, or fragment thereof.

69. (New) The method of claim 56, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific or bifunctional antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

70. (New) A method of treating a patient having a disease or disorder characterized by amyloid beta deposition, comprising administering an effective dose of an antibody that binds amyloid deposits or a component thereof, thereby treating the subject having disease or disorder characterized by amyloid beta deposition.

71. (New) A method of treating a patient having a disease or disorder characterized by amyloid beta deposition, comprising administering an effective dose of an antibody that specifically binds amyloid deposits or a component thereof, thereby treating the subject having disease or disorder characterized by amyloid beta deposition.

72. (New) A method of treating a subject having a disease or disorder characterized by amyloid beta deposition, comprising the step of administering an antibody which is targeted to amyloid  $\beta$  peptide, or to fragment thereof, thereby treating the subject having disease or disorder characterized by amyloid beta deposition.

73. (New) The method of claim 72, wherein the antibody is directed to amyloid  $\beta$  peptide, or fragment thereof.

74. (New) The method of claim 70, wherein the antibody is directed to an epitope comprising the first N terminal residue of natural A $\beta$ .

75. (New) The method of claim 70, wherein the antibody is directed to an epitope selected from the group consisting of residues 1-5, 1-10, 1-12, 1-16, and 1-25 of A $\beta$ .

76. (New) The method of claim 70, wherein the antibody is directed to N-terminus-truncated amyloid  $\beta$  peptide fragment.

77. (New) The method of claim 70, wherein the antibody is directed to an epitope comprising the C-terminal amino acid of a naturally occurring form of amyloid  $\beta$ .

78. (New) The method of claim 70, wherein the antibody is directed to the A $\beta$  33-42 epitope.

79. (New) The method of claim 71, wherein the antibody is 21F12.

80. (New) The method of claim 72, wherein the antibody is directed to C-terminus-truncated amyloid  $\beta$  peptide fragment.

81. (New) The method of claim 70, wherein the antibody is directed to the amyloid precursor protein, or a naturally occurring form of amyloid  $\beta$ .

82. (New) The method of claim 70, wherein the antibody is directed to the amyloid precursor protein, or fragment thereof.

83. (New) The method of claim 70 or 72, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific or bifunctional antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

84. (New) The method of claim 70, wherein the disease or disorder characterized by amyloid beta deposition is mild cognitive impairment, or Alzheimer's disease associated with Down's syndrome.

85. (New) The method of claim 70, wherein the disease or disorder characterized by amyloid beta deposition is late or early onset Alzheimer's disease, SAA amyloidosis, hereditary Icelandic syndrome, multiple myeloma, mad cow disease, Creutzfeldt Jakob disease, sheep scrapie, mink spongiform encephalopathy, mild cognitive impairment, or Alzheimer's disease associated with Down's syndrome.

86. (New) The method of claim 72, wherein the disease or disorder characterized by amyloid beta deposition is mild cognitive impairment (MCI), cerebral amyloid angiopathy or congiphylic angiopathy, Alzheimer's disease associated with Down Syndrome, or inclusion-body myositis.

87. (New) A method for preventing or treating a disease characterized by an accumulation of amyloid deposits in the brain of a patient, comprising the step of administering an antibody which is targeted to an amyloid  $\beta$  peptide, thereby reducing the level of amyloid  $\beta$  in the brain of the patient.

88. (New) A method for delaying or inhibiting or suppressing the accumulation of an amyloid  $\beta$  peptide or fragment thereof, comprising the step of administering

an antibody which is targeted to an amyloid  $\beta$  peptide, or to fragment thereof, thereby delaying or inhibiting or suppressing accumulation of amyloid  $\beta$  peptide or fragment thereof in the brain.

89. (New) The method of claim 87, wherein the antibody is directed to the amyloid precursor protein, or a naturally occurring form of amyloid  $\beta$ .

90. (New) The method of claim 88, wherein the antibody is directed to the amyloid precursor protein, or fragment thereof.

91. (New) The method of claim 87, wherein the antibody is directed to an epitope comprising the first N terminal residue of natural A $\beta$ .

92. (New) The method of claim 87, wherein the antibody is directed to an epitope selected from the group consisting of residues 1-5, 1-10, 1-12, 1-16, and 1-25 of A $\beta$ .

93. (New) The method of claim 88, wherein the antibody is directed to N-terminus-truncated amyloid  $\beta$  peptide fragment.

94. (New) The method of claim 87, wherein the antibody is directed to an epitope comprising the C-terminal amino acid of a naturally occurring form of amyloid  $\beta$ .

95. (New) The method of claim 87, wherein the antibody is directed to the A $\beta$  33-42 epitope.

96. (New) The method of claim 95, wherein the antibody is 21F12.

97. (New) The method of claim 88, wherein the antibody is directed to C-terminus-truncated amyloid  $\beta$  peptide fragment.

98. (New) The method of claim 87, wherein the antibody is directed to the amyloid precursor protein, or a naturally occurring form of amyloid  $\beta$ .

99. (New) The method of claim 88, wherein the antibody is directed to the amyloid precursor protein, or fragment thereof.

100. (New) The method of claim 88, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific or bifunctional antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

101. (New) An antibody directed to an epitope comprising the first N terminal residue of natural A $\beta$ .

102. (New) The antibody of claim 101, wherein the epitope selected from the group consisting of residues 1-5, 1-10, 1-12, 1-16, and 1-25 of A $\beta$ .

103. (New) An antibody that is free-end specific and is targeted to the free N-terminus of amyloid  $\beta$  -peptide.

104. (New) The method of claim 101, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific or bifunctional antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

105. (New) A antibody directed to an epitope comprising the first N terminal residue of natural A $\beta$ , wherein the N-terminal residue of the epitope is aspartate.

106. (New) The antibody of claim 105, wherein the epitope selected from the group consisting of residues 1-5, 1-10, 1-12, 1-16, and 1-25 of A $\beta$ .

107. (New) A antibody that is free-end specific and is targeted to the free N-terminus of amyloid  $\beta$  -peptide, wherein the first amino acid of amyloid  $\beta$  -peptide of said is aspartate.

108. (New) The antibody of claim 107, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

109. (New) A antibody directed to an epitope consisting of a fragment of amyloid  $\beta$  peptide fragment.

110. (New) The antibody of claim 109, wherein the epitope is within residues 1-5, 5-10, 10-15, 15-20, 25-30, 10-20, 20-30, 10-25, 1-28, 1-10, or 1-16 of amyloid  $\beta$ .

111. An antibody that is free-end specific and is targeted to the free N terminus of N and/or C-terminus-truncated amyloid  $\beta$  peptide fragment.

112. (New) The antibody of claim 109, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

113. (New) An antibody directed to an epitope comprising the C-terminal amino acid of a naturally occurring form of amyloid  $\beta$ .

114. (New) The antibody of claim 113, which is directed to the A $\beta$  33-42 epitope.

115. (New) An antibody that is free-end specific and is targeted to the free C-terminus of N- and/or C-terminus-truncated amyloid  $\beta$  peptide fragment.

116. (New) The antibody of claim 115, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

117. (New) A single chain or artificial antibody that is free-end specific and is targeted to the free C-terminus of the amyloid  $\beta$  -peptide A $\beta$  1-42.

118. (New) A single chain or artificial antibody that is free-end specific and is targeted to the free C-terminus of the amyloid  $\beta$  -peptide A $\beta$  1-42.

119. (New) A pharmaceutical composition comprising an amount of the antibody of claim 103 and a pharmaceutical acceptable carrier.

120. (New) The pharmaceutical composition of claim 64, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially or orally.

121. (New) The pharmaceutical composition of claim 64, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially, orally, topically or intravenously.

122. (New) The pharmaceutical composition of claim 64, wherein the composition is administered subcutaneously, intravenously, intradermally, intramuscularly, intraperitoneally, intracerebrally, intranasally, orally, transdermally, buccally, intra-arterially, intaranially, or intracephalically.

123. (New) A pharmaceutical composition comprising an amount of the antibody of claim 107 and a pharmaceutical acceptable carrier.

124. (New) The pharmaceutical composition of claim 123, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially or orally.

125. (New) The pharmaceutical composition of claim 123, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially, orally, topically or intravenously.



126. (New) The pharmaceutical composition of claim 123, wherein the composition is administered subcutaneously, intravenously, intradermally, intramuscularly, intraperitoneally, intracerebrally, intranasally, orally, transdermally, buccally, intra-arterially, intaranially, or intracephalically.

127. (New) A pharmaceutical composition comprising an amount of the antibody of claim 111 and a pharmaceutical acceptable carrier.

128. (New) The pharmaceutical composition of claim 127, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially or orally.

129. (New) The pharmaceutical composition of claim 127, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially, orally, topically or intravenously.

130. (New) The pharmaceutical composition of claim 127, wherein the composition is administered subcutaneously, intravenously, intradermally, intramuscularly, intraperitoneally, intracerebrally, intranasally, orally, transdermally, buccally, intra-arterially, intaranially, or intracephalically.

131. (New) A pharmaceutical composition comprising an amount of the antibody of claim 115 and a pharmaceutical acceptable carrier.

132. (New) The pharmaceutical composition of claim 131, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially or orally.

133. (New) The pharmaceutical composition of claim 131, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially, orally, topically or intravenously.

134. (New) The pharmaceutical composition of claim 131, wherein the composition is administered subcutaneously, intravenously, intradermally, intramuscularly, intraperitoneally, intracerebrally, intranasally, orally, transdermally, buccally, intra-arterially, intranially, or intracephalically.

135. (New) A pharmaceutical composition comprising an amount of the antibody of claim 118 and a pharmaceutical acceptable carrier.

136. (New) The pharmaceutical composition of claim 135, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially or orally.

137. (New) The pharmaceutical composition of claim 135, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially, orally, topically or intravenously.

138. (New) The pharmaceutical composition of claim 135, wherein the composition is administered subcutaneously, intravenously, intradermally, intramuscularly, intraperitoneally, intracerebrally, intranasally, orally, transdermally, buccally, intra-arterially, intranially, or intracephalically.

139. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 101, thereby treating the subject having Alzheimer's Disease.

140. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 103, thereby treating the subject having Alzheimer's Disease.

141. (New) A method of treating a subject having a disease or disorder characterized by amyloid beta deposition comprising the step of administering the antibody of

claim 103, thereby treating the subject having a disease or disorder characterized by amyloid beta deposition.

142. (New) A method for eliminating, reducing the risk of, or delaying the onset of a disease characterized by amyloid deposits, comprising the step of administering the antibody of claim 103, thereby eliminating or reducing the risk of, or delaying the accumulation of amyloid  $\beta$  peptide in the brain.

143. (New) A method for delaying or inhibiting or suppressing the accumulation of an amyloid  $\beta$  peptide or fragment thereof, comprising the step of administering the antibody of claim 103, thereby delaying or inhibiting or suppressing accumulation of amyloid  $\beta$  peptide or fragment thereof in the brain.

144. (New) A method for preventing or ameliorating the neuropathology associated with amyloidogenic disease, comprising the step of administering the antibody of claim 103.

145. (New) A method for delaying or inhibiting or suppressing the neurotoxicity of amyloid  $\beta$  peptide or fragment thereof, comprising the step of administering the antibody of claim 103, thereby delaying or inhibiting or suppressing the neurotoxicity of amyloid  $\beta$  peptide or fragment thereof.

146. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 107, thereby treating the subject having Alzheimer's Disease.

147. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 107, thereby treating the subject having Alzheimer's Disease.

148. (New) A method of treating a subject having a disease or disorder characterized by amyloid beta deposition comprising the step of administering the antibody of claim 107, thereby treating the subject having a disease or disorder characterized by amyloid beta deposition.

149. (New) A method for eliminating, reducing the risk of, or delaying the onset of a disease characterized by amyloid deposits, comprising the step of administering the antibody of claim 107, thereby eliminating or reducing the risk of, or delaying the accumulation of amyloid  $\beta$  peptide in the brain.

150. (New) A method for delaying or inhibiting or suppressing the accumulation of an amyloid  $\beta$  peptide or fragment thereof, comprising the step of administering the antibody of claim 107, thereby delaying or inhibiting or suppressing accumulation of amyloid  $\beta$  peptide or fragment thereof in the brain.

151. (New) A method for preventing or ameliorating the neuropathology associated with amyloidogenic disease, comprising the step of administering the antibody of claim 107.

152. (New) A method for delaying or inhibiting or suppressing the neurotoxicity of amyloid  $\beta$  peptide or fragment thereof, comprising the step of administering the antibody of claim 107, thereby delaying or inhibiting or suppressing the neurotoxicity of amyloid  $\beta$  peptide or fragment thereof.

153. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 111, thereby treating the subject having Alzheimer's Disease.

154. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 111, thereby treating the subject having Alzheimer's Disease.

155. (New) A method of treating a subject having a disease or disorder characterized by amyloid beta deposition comprising the step of administering the antibody of claim 111, thereby treating the subject having a disease or disorder characterized by amyloid beta deposition.

156. (New) A method for eliminating, reducing the risk of, or delaying the onset of a disease characterized by amyloid deposits, comprising the step of administering the antibody of claim 111, thereby eliminating or reducing the risk of, or delaying the accumulation of amyloid  $\beta$  peptide in the brain.

157. (New) A method for delaying or inhibiting or suppressing the accumulation of an amyloid  $\beta$  peptide or fragment thereof, comprising the step of administering the antibody of claim 111, thereby delaying or inhibiting or suppressing accumulation of amyloid  $\beta$  peptide or fragment thereof in the brain.

158. (New) A method for preventing or ameliorating the neuropathology associated with amyloidogenic disease, comprising the step of administering the antibody of claim 111.

159. (New) A method for delaying or inhibiting or suppressing the neurotoxicity of amyloid  $\beta$  peptide or fragment thereof, comprising the step of administering the antibody of claim 111, thereby delaying or inhibiting or suppressing the neurotoxicity of amyloid  $\beta$  peptide or fragment thereof.

160. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 115, thereby treating the subject having Alzheimer's Disease.

161. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 115, thereby treating the subject having Alzheimer's Disease.

162. (New) A method of treating a subject having a disease or disorder characterized by amyloid beta deposition comprising the step of administering the antibody of claim 115, thereby treating the subject having a disease or disorder characterized by amyloid beta deposition.

163. (New) A method for eliminating, reducing the risk of, or delaying the onset of a disease characterized by amyloid deposits, comprising the step of administering the antibody of claim 115, thereby eliminating or reducing the risk of, or delaying the accumulation of amyloid  $\beta$  peptide in the brain.

164. (New) A method for delaying or inhibiting or suppressing the accumulation of an amyloid  $\beta$  peptide or fragment thereof, comprising the step of administering the antibody of claim 115, thereby delaying or inhibiting or suppressing accumulation of amyloid  $\beta$  peptide or fragment thereof in the brain.

165. (New) A method for preventing or ameliorating the neuropathology associated with amyloidogenic disease, comprising the step of administering the antibody of claim 115.

166. (New) A method for delaying or inhibiting or suppressing the neurotoxicity of amyloid  $\beta$  peptide or fragment thereof, comprising the step of administering the

antibody of claim 115, thereby delaying or inhibiting or suppressing the neurotoxicity of amyloid  $\beta$  peptide or fragment thereof.

167. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 118, thereby treating the subject having Alzheimer's Disease.

168. (New) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 118, thereby treating the subject having Alzheimer's Disease.

169. (New) A method of treating a subject having a disease or disorder characterized by amyloid beta deposition comprising the step of administering the antibody of claim 118, thereby treating the subject having a disease or disorder characterized by amyloid beta deposition.

170. (New) A method for eliminating, reducing the risk of, or delaying the onset of a disease characterized by amyloid deposits, comprising the step of administering the antibody of claim 118, thereby eliminating or reducing the risk of, or delaying the accumulation of amyloid  $\beta$  peptide in the brain.

171. (New) A method for delaying or inhibiting or suppressing the accumulation of an amyloid  $\beta$  peptide or fragment thereof, comprising the step of administering the antibody of claim 118, thereby delaying or inhibiting or suppressing accumulation of amyloid  $\beta$  peptide or fragment thereof in the brain.

172. (New) A method for preventing or ameliorating the neuropathology associated with amyloidogenic disease, comprising the step of administering the antibody of claim 118.

173. (New) A method for delaying or inhibiting or suppressing the neurotoxicity of amyloid  $\beta$  peptide or fragment thereof, comprising the step of administering the antibody of claim 118, thereby delaying or inhibiting or suppressing the neurotoxicity of amyloid  $\beta$  peptide or fragment thereof.